	OSD RDT&E BUDGET ITE	February 2008						
APPROPRIATION/ BUDGET ACTIVITY  RDTE, Defense Wide BA 05  PE NUMBER AND TITLE  0604161D8Z - Nuclear & Conventional Phys Sec Equip						s Sec Equip		
	COST (\$ in Millions)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate
P163	Nuclear & Conventional Phys Sec Equip	11.735	3.252	4.355	4.515	4.524	4.612	4.735

A. Mission Description and Budget Item Justification: The purpose of this program is the system development and validation of conventional and nuclear physical security equipment (PSE) systems for all DoD components. This program supports the protection of tactical, fixed, and nuclear weapons systems, DoD personnel and DoD facilities. The funds are used to provide PSE RDT&E for continuing and evolving individual Service and joint PSE requirements that provide capability in the areas of force protection and tactical security equipment; robotic security systems integration; waterside security systems; explosive detection equipment; locks, safes and vaults; commercial-off-the-shelf (COTS) testing; and nuclear weapons security. A number of RDT&E efforts arising from PE 603161D8Z will transition to this PE for system demonstration and validation. The PSE program is organized so that representatives from the Army, Navy, Air Force, and Defense Threat Reduction Agency (DTRA) monitor, direct and prioritize potential and existing PSE programs through the auspices of the Physical Security Equipment Action Group (PSEAG) and the Security Policy Verification Committee (SPVC). With few exceptions, each Service sponsors RDT&E efforts for technologies and programs that have multi-service application. This program element supports: 1) the Army's PSE RDT&E efforts in the areas of Interior and Exterior Detection, Security Lighting, Security Barriers and Security Display Units; 2) the Air Force's PSE RDT&E effort in the areas of Exterior Detection/Surveillance, Entry Control, Delay/Denial, Tactical Systems and Airborne Intrusion; 3) the Navy's PSE RDT&E efforts in the areas of Waterside Security, Explosive Detection, and improved technology for Locks, Safes and Vaults; and 4) DTRA's PSE RDT&E efforts that enhance the security of Navy and Air Force nuclear assets. The program element also supports all four Services' identification and redesign of developmental, non-developmental, and commercial-off-the-shelf equipment to meet physic

B. Program Change Summary	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2008)	12.008	3.281	4.332
Current BES/President's Budget (FY 2009)	11.735	3.252	4.355
Total Adjustments	-0.273	-0.029	0.023
Congressional Program Reductions			
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer			
Other	-0.273	-0.029	0.023

0		February 2008									
	ATION/ BUDGET ACTIVITY refense Wide BA 05			PE NUMBER AND TITLE 0604161D8Z - Nuclear & Conventional Phys Sec Equip							
C. Other P	rogram Funding Summar	v Not applicable for this iter	m.								
D. Acquisit	ion Strategy Not applicable	e for this item.									
	ance Metrics:										
F <b>Y</b>	Strategic Goals Supported	Existing Baseline	Planned Performance Improvement / Requirement Goal	Actual Performance Improvement	Planned Performance Metric / Methods of Measurement	Actual Performance Metric / Methods of Measurement					
Verification		cost, schedule and technical	ved through the DoD Physical progress of each project is rev								
Comment: 7	Committee (SPVC). The c	cost, schedule and technical									
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OSD RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)								February 2008	
_	RIATION/ BUDGET ACTIVITY , <b>Defense Wide BA 05</b>		E NUMBER AND TIT <b>604161D8Z - N</b> u		s Sec Equip	PROJECT <b>P163</b>			
	COST (\$ in Millions)	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	
P163	Nuclear & Conventional Phys Sec Equip	11.73	35 3.252	4.355	4.515	4.524	4.612	4.735	

A. Mission Description and Budget Item Justification: The purpose of this program is the system development and validation of conventional and nuclear physical security equipment (PSE) systems for all DoD components. This program supports the protection of tactical, fixed, and nuclear weapons systems, DoD personnel and DoD facilities. The funds are used to provide PSE RDT&E for continuing and evolving individual Service and joint PSE requirements that provide capability in the areas of force protection and tactical security equipment; robotic security systems integration; waterside security systems; explosive detection equipment; locks, safes and vaults; commercial-off-the-shelf (COTS) testing; and nuclear weapons security. A number of RDT&E efforts arising from PE 603161D8Z will transition to this PE for system demonstration and validation. The PSE program is organized so that representatives from the Army, Navy, Air Force, and Defense Threat Reduction Agency (DTRA) monitor, direct and prioritize potential and existing PSE programs through the auspices of the Physical Security Equipment Action Group (PSEAG) and the Security Policy Verification Committee (SPVC). With few exceptions, each Service sponsors RDT&E efforts for technologies and programs that have multi-service application. This program element supports: 1) the Army's PSE RDT&E efforts in the areas of Interior and Exterior Detection, Security Lighting, Security Barriers and Security Display Units; 2) the Air Force's PSE RDT&E effort in the areas of Exterior Detection/Surveillance, Entry Control, Delay/Denial, Tactical Systems and Airborne Intrusion; 3) the Navy's PSE RDT&E efforts the areas of Waterside Security, Explosive Detection, and improved technology for Locks, Safes and Vaults; and 4) DTRA's PSE RDT&E efforts that enhance the security of Navy and Air Force nuclear assets. The program element also supports all four Services' identification and redesign of developmental, non-developmental, and commercial-off-the-shelf equipment to meet physical

# **B.** Accomplishments/Planned Program:

Accomplishments/Planned Program Title:	FY 2007	FY 2008	FY 2009
Robotic Security Systems Integration	7.530	1.000	2.025

## FY 2007 Accomplishments:

- Conducted Pre-planned Program Improvements (P3I) for Mobile Detection Assessment and Response System (MDARS) for greater sensing distance.
- Increased MDARS speed and response feed to support Remote Detection Challenge and Response (REDCAR).
- Executed a congressional add to develop the Transportable Under Vehicle Inspection System.
- Continued to integrate unmanned systems to meet physical security requirements.
- Continued to manage, develop, evaluate, and test Detection/Assessment/Delay/Denial products.
- Continued to manage sensor and assessment product developments and tests.
- Continued to prepare operational systems improvement plans; develop technology roadmaps, and update system architecture.
- Continued to test, develop, and integrate equipment to improve security and access to facilities.

FY 2008 Plans:

# OSD RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit) APPROPRIATION/ BUDGET ACTIVITY RDTE, Defense Wide BA 05 PE NUMBER AND TITLE 0604161D8Z - Nuclear & Conventional Phys Sec Equip P163

- Refurbish the MDARS patrol unit vehicle.
- Continue Mobile Detection Assessment and Response System (MDARS) modernization effort of Detection-On-The-Move, intrusion detection, and less than lethal capabilities.
- Continue to integrate unmanned systems to meet physical security requirements.
- Continue to manage, develop, evaluate, and test Detection/Assessment/Delay/Denial products.
- Continue to manage sensor and assessment product developments and tests.
- Continue to prepare operational systems improvement plans; develop technology roadmaps, and update system architecture.
- Continue to test, develop, and integrate equipment to improve security and access to facilities.

### FY 2009 Plans:

- Continue to integrate unmanned systems to meet physical security requirements.
- Continue to manage, develop, evaluate, and test Detection/Assessment/Delay/Denial products.
- Continue to manage sensor and assessment product developments and tests.
- Continue to prepare operational systems improvement plans; develop technology roadmaps, and update system architecture.
- Continue to test, develop, and integrate equipment to improve security and access to facilities.

Accomplishments/Planned Program Title:	FY 2007	FY 2008	FY 2009
Force Protection/Tactical Security Equipment	4.205	2.252	2.330

### FY 2007 Accomplishments:

- · Continued the spiral development/modernization of the Battlefield Anti-Intrusion System (BAIS).
- Developed BAIS two-way communications capability by developing and testing a Handheld Monitor/Transceiver.
- Continued to manage, develop, evaluate, and test Detection/Assessment/Delay/Denial products.
- Continued to manage sensor and assessment product developments and tests.
- Continued to prepare operational systems improvement plans; develop technology roadmaps, and update system architecture.
- Continued to test, develop, and integrate equipment to improve security and access to facilities.

### FY 2008 Plans:

- Continue the spiral development/modernization of the Battlefield Anti-Intrusion System (BAIS).
- Develop BAIS remote sensor activation/deactivation capability.
- Continue to manage, develop, evaluate, and test Detection/Assessment/Delay/Denial products.
- Continue to manage sensor and assessment product developments and tests.
- Continue to prepare operational systems improvement plans; develop technology roadmaps, and update system architecture.
- Continue to test, develop, and integrate equipment to improve security and access to facilities.

### FY 2009 Plans:

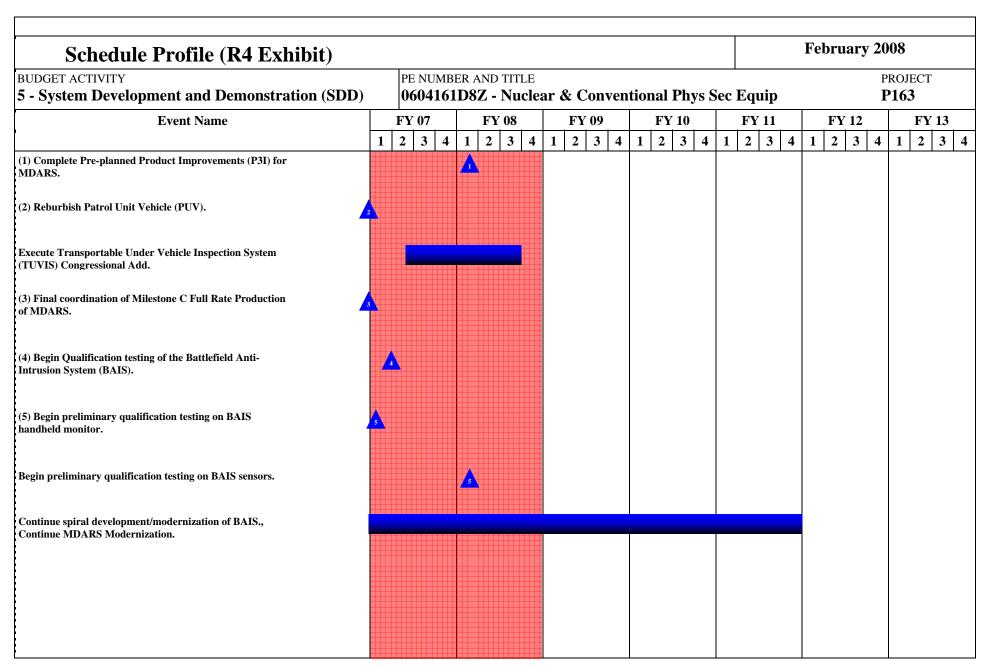
- Continue the spiral development/modernization of the Battlefield Anti-Intrusion System (BAIS).
- Develop BAIS sensor-to-sensor communications capability.
- Begin Production Qualification Testing (POT2) of the BAIS.
- Continue to manage, develop, evaluate, and test Detection/Assessment/Delay/Denial products.
- Continue to manage sensor and assessment product developments and tests.

OSD RDT&E BUDGET ITE	M JUSTIFICATION (R2a Exhibit)	February 2008
APPROPRIATION/ BUDGET ACTIVITY  RDTE, Defense Wide BA 05	PE NUMBER AND TITLE  0604161D8Z - Nuclear & Conventional Phys Sec Equip	PROJECT <b>P163</b>
<ul> <li>Continue to prepare operational systems improvement plans; de</li> <li>Continue to test, develop, and integrate equipment to improve so</li> </ul>		
C. Other Program Funding Summary Not applicable for	r this item.	
<b>D.</b> Acquisition Strategy Not applicable for this item.		
E. Major Performers Not applicable for this item.		

OSD RDT&E COST ANALYSIS (R3)									February 2008				
				PE NUMBER AND TITLE  0604161D8Z - Nuclear & Conventional Phys Sec 1						PROJECT P163			
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract	
MDARS	MIPR	PM-FPS (USA), Ft. Belvoir, VA		4330		1000	1-2Q	2000		Cont.	Cont.		
BAIS	MIPR	PM-FPS (USA), Ft. Belvoir, VA		3970						Cont.	Cont.		
TUVIS (Congressional Add)	MIPR	AFRL (USAF), Tyndall, AFB, FL		2500							2500		
Sub	total:			10800		1000		2000		Cont.	Cont.		
II. Support Costs	Contract	Performing Activity &	Total PVs Cost	FY 2007	FY 2007	FY 2008	FY 2008	FY 2009	FY 2009	Cost To	Total	Target	
II. Support Costs	Contract	Performing Activity &	Total	FY 2007	FY 2007	FY 2008	FY 2008	FY 2009	FY 2009	Cost To	Total	Target	
	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date		Total Cost	Value of	
	Method & Type				Award		Award		Award			Value of	
	Method & Type				Award		Award		Award	Complete  Cost To		Target Value of Contract  Target Value of Contract	
Sub	Method & Type total:  Contract Method &	Location  Performing Activity &	PYs Cost  Total	Cost FY 2007	Award Date FY 2007 Award	Cost FY 2008	Award Date FY 2008 Award	Cost FY 2009	Award Date FY 2009 Award	Complete  Cost To	Cost	Value of Contract	
Sub  III. Test And Evaluation  BAIS	Method & Type total:  Contract Method & Type	Performing Activity & Location  PM-FPS (USA), Ft.	PYs Cost  Total	Cost FY 2007	Award Date FY 2007 Award	Cost FY 2008 Cost	Award Date FY 2008 Award Date	Cost FY 2009 Cost	Award Date  FY 2009 Award Date	Complete  Cost To	Cost Total Cost	Value of Contract	
Sub  III. Test And Evaluation  BAIS	Method & Type total:  Contract Method & Type MIPR	Performing Activity & Location  PM-FPS (USA), Ft.	PYs Cost  Total	Cost FY 2007	Award Date FY 2007 Award	FY 2008 Cost 2052	Award Date FY 2008 Award Date	FY 2009 Cost 1955	Award Date  FY 2009 Award Date	Complete  Cost To	Total Cost 4007	Value of Contract	
Sub  III. Test And Evaluation  BAIS	Method & Type total:  Contract Method & Type MIPR	Performing Activity & Location  PM-FPS (USA), Ft.	PYs Cost  Total	Cost FY 2007	Award Date FY 2007 Award	FY 2008 Cost 2052	Award Date FY 2008 Award Date	FY 2009 Cost 1955	Award Date  FY 2009 Award Date	Cost To Complete  Cost To	Total Cost 4007	Value of Contract	

R-1 Budget Line Item No. 102 Page 6 of 6 UNCLASSIFIED Exhibit R-3 OSD RDT&E COST ANALYSIS

, VA							
C (LICA) E4							
S (USA), Ft.	365	100	1-2Q	200	1-2Q		665
	250						250
. , , ,				200			200
	935	200		400			1535
	(USAF), Tyndall, EL S (USA), Ft.	(USAF), Tyndall, L S (USA), Ft.	(USAF), Tyndall, USAF), Tyndall, USAF), Tyndall, USAF,	(USAF), Tyndall, 250 L S (USA), Ft.	(USAF), Tyndall, USAF),	(USAF), Tyndall, USAF), USAF)	(USAF), Tyndall, USAF), USAF



Schedule Detail (R4a Ex		February 2008					
BUDGET ACTIVITY 5 - System Development and Demonstra	PE NUMBER A 0604161D8	ND TITLE Z - Nuclear &	Phys Sec Equip	PROJECT P163			
Schedule Detail	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Complete Pre-planned Product Improvements (P3I) for MDARS.		1Q - 4Q					
Reburbish Patrol Unit Vehicle (PUV).	1Q - 2Q						
Execute Transportable Under Vehicle Inspection System (TUVIS) Congressional Add.	2Q - 4Q	1Q - 4Q					
Final coordination of Milestone C Full Rate Production of MDARS.	1Q - 2Q						
Begin Qualification testing of the Battlefield Anti-Intrusion System (BAIS).	2Q - 3Q						
Begin preliminary qualification testing on BAIS handheld monitor.	1Q - 4Q	1Q					
Begin preliminary qualification testing on BAIS sensors.		1Q - 4Q	1Q				
Continue spiral development/modernization of BAIS.	1Q - 4Q	1Q - 4Q					
Continue MDARS Modernization.		1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q - 4Q	1Q	